

TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 6:1 - BENZENE EMISSIONS FROM RETAIL SERVICE STATIONS

(Adopted 4/25/1989)

- A. Purpose: To comply with Health and Safety Code Section 93101, by reducing airborne benzene emissions from retail service stations.
- B. Definitions:
 - 1. ARB-Certified Vapor Recovery System: A vapor recovery system which has been certified by the State Board pursuant to Section 41954.
 - 2. Excavation: Exposure to view by digging.
 - 3. Existing Retail Service Station: Any retail service station operating, constructed, or under construction as of April 25, 1989.
 - 4. Floating Roof: A pontoon-type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank wall. The control equipment provided for in this Section shall not be used if the gasoline or petroleum distillate has a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 - 5. Gasoline: Any organic liquid (including petroleum distillates and methanol) having a Reid vapor pressure of four pounds or greater and used as a motor vehicle fuel or any fuel which is commonly or commercially known or sold as gasoline.
 - 6. Gasoline Storage Tank: Any gasoline storage container equipped with no vapor control or splash loading, submerged fill pipe loading, or Phase I or II vapor recovery loading systems.
 - 7. Hold-Open Latch: A device, approved by the ARB, that allows hands-off refueling of a vehicle.
 - 8. Leak Free: A liquid leak of less than four drops per minute.
 - 9. Motor Vehicle: The same meaning as defined in Section 415 of the Vehicle Code.
 - 10. New Retail Service Station: Any retail service station which is not constructed or under construction as of April 25, 1989.
 - 11. Offset Fill Pipe: Any liquid fill pipe which contains one or more pipe bends and the horizontal distance between the truck delivery connection and the storage container fill opening is 6.1 meters (20 feet) or greater.
 - 12. Owner or Operator: An owner or operator of a retail service station.
 - 13. Phase I Vapor Recovery System: A gasoline vapor recovery system which recovers vapors during the transfer of gasoline from delivery tanks into stationary storage tanks.
 - 14. Phase II Vapor Recovery System: A gasoline vapor recovery system which recovers vapors during the fueling of motor vehicles from stationary storage tanks.
 - 15. Pressure Tank: A tank which maintains working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere.

16. Retail Service Station: Any new or existing motor vehicle fueling service station subject to payment of California sales tax on gasoline sales.
17. Submerged Fill Pipe: Any fill pipe which has its discharge opening entirely submerged when the liquid level is six inches (6") above the bottom of the tank. "Submerged fill pipe", when applied to a tank which is loaded from the side, means any fill pipe which has its discharge opening entirely submerged when the liquid level is eighteen inches (18") above the bottom of the tank.
18. Tank Replacement: Replacement of one or more gasoline stationary storage tanks at an existing retail service station or excavation of 50 percent or more of an existing retail service station's total underground liquid piping from the stationary storage tanks to the gasoline dispensers.
19. Throughput: The volume of gasoline dispensed at a retail service station.
20. Vapor Tight: A leak of less than 100 percent of the lower explosive limit on a combustible gas detector measured at a distance of 2.5 cm (1 inch) from the source or no visible evidence of air entrainment in the sight glasses of liquid delivery hoses.

C. Compliance Schedule

1. After January 15, 1989, the owner or operator of any new retail service station subject to this Rule shall comply with its provisions at the time gasoline is first sold from the station.
2. The owner or operator of any existing retail service station without ARB-certified Phase I and II vapor recovery systems shall notify the control officer in writing in advance of an intended tank replacement and shall secure all necessary permits and other approvals for the installation of Phase I and II vapor recovery systems. The owner or operator of an existing retail service station shall comply with the provisions of this Rule upon completion of the tank replacement.
3. The owner or operator of an existing retail service station who has not earlier complied in accordance with Subsection C.2., shall, by May 1, 1990, secure all permits and other approvals necessary for installation of the equipment required by this Rule. The owner or operator shall comply with the provisions of this Rule by May 1, 1991.
4. Excluding those existing retail service stations subject to this Rule as a result of tank replacement, the owner or operator of a previously exempt stationary storage tank or retail service station where the operation or annual throughput has changed such that the exemption from either the Phase I or II requirements or both is no longer applicable, shall comply with this Rule's provisions within 12 months of loss of said exemption.
5. Any owner or operator of a retail service station not exempt by Subsections D.2.b., D.2.c., or D.2.d., shall by July 1, 1990:
 - a. Install and maintain in good working order hold-open latches on all gasoline dispensers.
 - b. Conspicuously post in the gasoline dispensing area a reasonable facsimile of the following:

(Letters shall be minimum of 1-inch high)

WARNING: Gasoline vapors can be hazardous
to your health. Ask attendant how
hold-open latches can reduce your risk.

D. Phase I Vapor Recovery System Requirements:

1. No owner or operator shall transfer, permit the transfer, or provide equipment for the transfer of gasoline, and no other person shall transfer gasoline from a gasoline delivery tank at a retail service station unless an ARB-certified Phase I vapor recovery system is installed on the stationary storage tank and used during the transfer.
2. The provisions of Subsection D.1. shall not apply to:
 - a. Any person who, after October 1, 1971, loads or permits the loading of gasoline into any stationary tank or trailer, except through a permanent submerged fill pipe, unless such tank is a pressure tank or is equipped with a vapor recovery system or is equipped with a floating roof or other apparatus of equal efficiency which had been approved by the Air Pollution Control Officer, is guilty of a misdemeanor.
 - b. A stationary storage tank with a capacity of less than 260 gallons.
 - c. A stationary storage tank used the majority of the time for the fueling of implements of husbandry.
 - d. A stationary storage tank used exclusively to fuel motor vehicles with a fuel capacity of five gallons or less.
 - e. An existing retail service station with an annual throughput of 480,000 or fewer gallons during the 1988 calendar year. If during any calendar year thereafter the gasoline throughput from such tanks at the existing retail service station exceeds 480,000 gallons, this exemption shall cease to apply commencing with the first day of the following calendar year.
 - f. A transfer to a stationary storage tank at an existing retail service station which receives gasoline exclusively from delivery tanks that are not required to be equipped with vapor recovery systems.
3. Notwithstanding Subsection D.2.e., at the time of tank replacement at any existing retail service station, ARB-certified Phase I vapor recovery systems shall be installed and used thereafter on all of the station facilities, except those which are exempt by

Subsections D.2.b., D.2.c., D.2.e., or D.2.f.

4. All Phase I gasoline vapor recovery equipment shall be installed as required by ARB certification and operated in accordance with the manufacturers specifications. The equipment shall be maintained to be leak free, vapor tight and in good working order.

E. Phase II Vapor Recovery System Requirements:

1. No owner or operator shall transfer, permit the transfer or provide equipment for the transfer of gasoline from a stationary storage tank at a retail service station into a motor vehicle fuel tank unless an ARB-certified Phase II vapor recovery system is installed and used during the transfer.
2. The provisions of Subsection E.1. shall not apply to:
 - a. a stationary storage tank which is exempt from Phase I requirements under Subsections D.2.b., D.2.c., or D.2.e.
 - b. an existing retail service station which is exempt from Phase I requirements under Subsection D.2.e.
3. Notwithstanding Subsection E.2.b., at the time of tank replacement at an existing retail service station, ARB-certified Phase II vapor recovery systems shall be installed and used thereafter on all the station facilities, except those which are exempt by Subsection E.2.a.

F. Correction of Defects:

1. No owner or operator shall use or permit the use of any Phase II system or any component thereof containing a defect identified in Title 17, California Code of Regulations, Section 94006 until it has been repaired, replaced, or adjusted, as necessary to remove the defect, and, if required under Health and Safety Code Section 41960.2, district personnel have reinspected the system or have authorized its use pending reinspection. Nothing in this subdivision shall excuse compliance with subdivision E.1.

G. Operation and Maintenance

1. All Phase II gasoline vapor recovery equipment shall be installed as required by ARB certification and operated in accordance with the manufacturers specifications. The equipment shall be maintained to be leak free, vapor tight and in good working order.

2. The operator of each retail facility using a Phase II vapor recovery system shall conspicuously post operation instructions for the system in the gasoline dispensing area. The instructions shall clearly describe how to fuel vehicles correctly with vapor recovery nozzles used at the station and shall include a warning that topping off may result in spillage or re-circulation of gasoline and is prohibited. Additionally the instruction shall include the telephone number of the Tehama County Air Pollution District or the ARB for complaints.
3. A person shall not transfer, permit the transfer or provide equipment for the transfer of gasoline from a stationary storage tank subject to the provisions of Rule 6:1 E. (Phase II) into any motor vehicle fuel tank unless:
 - a. The equipment subject to this rule is operated and maintained with none of the following defects, pursuant to the definitions in the California Code of Regulations Section 94006. Subchapter 8, Chapter 1, Part III, of Title 17:
 - 1) Absence or disconnection of any component required to be used in the system as certified by the California Air Resources Board;
 - 2) A vapor hose which is crimped or flattened such that the vapor passage is blocked;
 - 3) A nozzle boot which is torn in one or more of the following manners:
 - a) Triangular-shaped or similar tear $\frac{1}{2}$ inch or more to a side, or hole $\frac{1}{2}$ inch or more in diameter or,
 - b) Slit 1 inch or more in length.
 - 4) Faceplate or flexible cone which is damaged in the following manner:
 - a) For balance nozzles and for nozzles for aspirator and educator assist type systems, damage shall be such that the capability to achieve a seal with a fill pipe interface is affected for $\frac{1}{4}$ of the circumference of the faceplate (accumulated);
 - b) For nozzles for vacuum assist type systems, more than $\frac{1}{4}$ of the flexible cone is missing;
 - 5) Nozzle shutoff mechanisms which malfunction in any manner;
 - 6) Vapor return lines, including such as swivels, anti-recirculation valves

and underground piping, which malfunction or are blocked;

- 7) Vapor processing unit which is inoperative or severely malfunctioning;
- 8) Vacuum producing device which is inoperative or severely malfunctioning;
- 9) Pressure/vacuum relief valves, vapor check valves, or dry breaks which are inoperative;
- 10) Any equipment defect which is identified in a California Air Resources Board system certification as substantially impairing the effectiveness of the system in reducing air contaminants.

H. Defective Phase II Equipment - Prohibition of Use:

1. Whenever the Air Pollution Control Officer or his designee determines that a Phase II vapor recovery system, or any component thereof, contains a defect specified by the Air Resources Board pursuant to Rule 6:1 G.3.a., the Air Pollution Control Officer or his designee shall mark such system or component "Out of Order". No person shall use or permit the use of such marked component or system until it has been repaired, replaced, or adjusted as required to permit proper operation, and the Air Pollution Control Officer or his designee has reinspected it or has authorized its use pending reinspection.

I. Fees:

1. Sources subject to this rule shall pay the fees required by Rule 2:11.